Project Managers' Advisory Group

MINUTES
June 18, 2007

Attending:

Alisa Cutler	EPMO
Bob Giannuzzi	EPMO
Jesus Lopez	EPMO
Gaye Mays	EPMO
John McShane	EPMO
Linda Hudson	EPMO
Barbara Swartz	ITS
Charles Richards	ITS
Todd Russ	ITS
Tom Hill	ITS
Patricia Thames	ITS
Vicky Kumar	OSC
Charles Fraley	DHHS
Lynne Beck	DHHS/DMH
Joe Cimbala	DMH/DD/SAS
Deanna Perry	DHHS/DIRM
Jim Skinner	Dept of Insurance
Cheryl Ritter	DOT
Carol Morin	DOC
Lucy Cornelius	DPI

Bob Giannuzzi welcomed everyone to the meeting and asked first-time participants to introduce themselves. There were no new attendees.

Bob called for approval of the May minutes – approved.

Jesus Lopez updated on the PMP exam prep class. He mentioned that the latest SAT survey produced 4.79 out of 5.00, which is the highest rating so far. He thanked **John McShane**, who stepped in as instructor when Steve Tedder left. **Bob Giannuzzi** was also thanked for his contribution as well as **Patricia Land** for her excellent administrative support,

NCPMI news was covered next. **John McShane** recapped the last few Public Sector LIG meetings that were well received. The next meeting will be held on August 2nd (no July meeting) at which **Vicky Kumar** will speak on the value of PM expertise. Craig Zimmer of NC State will speak at the June 27 PMO LIG on risk management. This year's annual event will take place on September 13 with the theme *Winning Strategies for Business*. **Vicky Kumar** said that agency employees will get the same discount as last year.

Bob Giannuzzi called for updates from the Task Groups.

- *Monthly Status Reporting* **Gaye Mays** reported that this team recommended adding a Status Reporting "jelly bean" indicating whether the report is current or late. This team is now inactive.
- *PM Tools* **Gaye** is working with **Glenn Poplawksi** and **Jim Tulenko** to prepare budget estimates for resource planning tools. Evaluations of SAP and IBM to take place in 3Q07.

- *Methodology* **Alisa Cutler** thanked everybody for their input on Lessons Learned and Staffing Plan template development. She informed that these documents had now been sent for upload to the EPMO webpage and the PPM tool. They are still working on the Closeout Review process. She said they are looking for new participants.

Bob Giannuzzi passed out the following information on upcoming teleconferences of interest to the PM Advisory Group. He also read some previews with detail on the topics of particular interest.

Organization/website	Contacts	Upcoming Calls
NASCIO http://www.nascio.org/committees/projectmanagement/	Stephanie Jamison 859/514-9148 sjamison@AMRms.com Access 888/272-7337 conference ID 6916986	July 24 (3:00) **Project Management and Quality Oversight of Outsourced IT Projects**
PMO Executive Council http://www.pmo.executiveboard.com/	Register at website	June 20 (12:00) **Designing a PMO Metrics Reporting Function**
CIO Executive Council http://www.cio.executiveboard.com/	Register at website	June 19 (12:00) **Compressing Project Estimation Time and Effort** July 11 (12:00) **Tools for Managing ERP Upgrades**
Application Executive Council http://www.aec.executiveboard.com/	Register at website	June 28 (11:00) **Release Management and Risk Mitigation**
Infrastructure Executive Council http://www.iec.executiveboard.com/	Register at website	July 10 (11:00) **Decision-Driven Customer Engagement**
Information Risk Executive Council http://www.irec.executiveboard.com/	Register at website	June 19 (11:00) **Third Party Risk Assessments** July 17 (11:00) **End-User Awareness Programs for Critical Asset Protection**
Enterprise Architecture Executive Council http://www.eaec.executiveboard.com/	Register at website	June 26 (12:00) **Enterprise Architecture Skills Development**

John McShane mentioned the possibility of more classes on RFP Labs and Requirements. He asked if anyone was interested in a Business Analyst classes. DPI and NCCCS would be

interested per **Lucy Cornelius** and **Tom Hill**, respectively. **Bob** added that the EPMO is looking at MS Project training options. He also offered the EPMO's services to agencies requesting training in business case development. **John** also pointed out that he's had discussions with the IT Procurement director on the need to improve the procurement process.

Charles Richards informed that PPM tool New User Training class was being held on June 19th at 3900 Wake Forest Rd. Conference Room B. APM training will follow in July. Tool Lunch and Learn topics are still being solicited. **Jim Skinner** commented that a shortcoming in the tool is that very little information passes from the project side to the applications side.

Bob Giannuzzi handed out a summary compiled by **Wendy Kuhn** of FAQs on status reporting and subsequent assessment (attached). These will be available in the PPM tool.

Bob introduced **Linda Hudson** as the EPMO's newest PMA. She has been assigned as prime PMA to a number of agencies and is making transitions to handle several of their projects.

Bob gave a brief summary of the preliminary findings from the audit of the EPMO. Although favorable conclusions were drawn on the EPMO's value, constructive recommendations on how to enhance its maturity level are expected to be included in the final report.

Bob passed out the Lessons Learned (attached) compiled from projects that closed out in the last month.

Bob announced that a presentation on the role of the ITS Business Relationship Management team will be given at the July meeting.

Meeting adjourned at 4:10 pm.

Frequently Asked Questions
(or Questions that we wish were frequently asked)

When do I close an Issue?

If you have provided a corrective action plan for an issue AND there are no outstanding action items remaining to be completed, please close the issue. If the issue still has outstanding action items or the corrective action plan has not yet been implemented, please do not close the issue.

What do I need to do with issues?

Each issue must have a planned completion date and an owner assigned. A corrective action plan is needed for all open issues. Each open issue should be updated monthly, as part of project status reporting, with corrective action plan activity.

How is my phase budget assessed?

Remember, only the PHASE budget is assessed. The phase budget is assessed based on the budget reported in the "Cost Tracking" tab under the "Revised Budget" heading (this is the same as the number reported in the "Budget Cost" tab plus any approved "Change Requests"). The "Status" tab must reflect the same approved phase budget as the "Cost Tracking" tab. Note: that this may vary from the forecast cost which is acceptable, but you should also ensure that the forecast is updated each month. In addition, be certain that you are using a reasonable labor rate (labor cost per hour plus overhead) for reporting costs for internal and external resources.

What is the "Cost Forecast" and what is it used for?

The "Cost Forecast" is the dollar estimate to complete the phase. Estimate to complete is future dollars planned to be spent on the phase and the estimate to complete is used to define how much money is planned to be spent on the phase in future months. Phase cost is a total of "Actual Costs" from the "Cost Tracking" tab and estimate to complete dollars from the "Cost Forecast" tab. Remember, in the "Cost Forecast" tab, forecast dollars are replaced with the actual dollars reported for the month when status reporting is completed. Also, forecast dollars must be managed – moved to the correct month to adjust for late starts or early starts to tasks. Make adjustments to both your "Cost Forecast" and your Staffing Plan on a monthly basis to reflect project realities.

On what basis are my actual and planned hours assessed?

Hours are assessed based on information provided in the monthly project status report created in the "Status" tab. Hours are verified against the staffing plan, so, ensure your staffing plan and the hours in the status report are accurate and up to date. Also ensure that last months plan and actual to date when added to the current month's planned and actual equal the current month plan and actual to date. If there's a discrepancy in any of the above, explain the anomaly by entering a note in the "Project Staff Utilization" Indicator (jelly bean).

If there is not an approved staffing plan attached in the "Document Management" tab, we will assume that resource utilization is constant for all months and will use the Current Month Plan Hours total. We will compare the amount of time remaining in the project with the remaining hours to see if the hours estimate to complete is logical and achievable. Check your planned resource utilization for the phase and ensure it's realistic.

I have my planned milestones listed on the schedule tab, what else do I need to do with them?

If you complete a milestone within a reporting period, indicate this in the "Accomplishment this Period" section of the "Status" tab. If you completed work towards the milestone include this information. If you plan to complete or work on a milestone in the next reporting period indicate that in the "Planned Accomplishments" section of the "Status" tab.

Remember, if your phase schedule is extended, revisit your planned milestones and adjust dates or add milestones as appropriate.

What should I report as my Completion Percent for the phase and for the project?

You can choose whether to report based on schedule, cost, hours or earned value. Select a metric that provides a reasonable picture of the progress of the project. Report consistently unless you provide an explanation for why the basis of the percentage changes.

How should I report my accomplishments?

Use active verbs that indicate progress that you have made towards the milestones and deliverables that will help you to achieve the goals of the project. If an accomplishment was planned for the "current period" in last month's report, indicate if it was completed, if it is still planned, or, if it is no longer planned (indicate the reason it is no longer needed).

What do I need to include in the document management tab?

In general, the more you include in the document management tab, the better we can understand your project. See the PPM workflow to ensure that you have met the minimum requirements. Ensure there is a staffing plan that provides planned and actual hours by resource by month. If you have a change, ensure that the change request with the necessary departmental approvals is included.

Any additional advice?

Double check your status report to ensure that all of the sections are completed and that the information provided is accurate for the month for which the project is being submitted. Ensure that when you review the data, it makes sense. If not, it might be worth double checking for accuracy.

Additional Questions?

Contact your Project Management Advisor (PMA) or the Enterprise Project Management Office (EPMO) Quality Assurance (QA) group on (919) 754-6607.

Lessons Learned Documentation

Exhibit A

DHHS NCFAST Case Management Business Function Definition

1. **LESSONS LEARNED** - What were the **positive** lessons learned (project strengths) from this effort?

- A sense of ownership was encouraged by the project management; therefore the project staff was very dedicated to the project and disappointed when the project was not approved.
- ETS encouraged the project to involve them early in the project, keeping them apprised as the development of the requirements and use cases proceeded.
- Develop a uniform, standard set of requirements and seek a case management tool that already has a standard, uniformed solution.
- Confirm that you do have buy-in from all your stakeholders, including Federal, State and County agencies.
- Do not plan to customize solution for individual counties.
- Provide status reports as defined in the communications plan.

2. **LESSONS LEARNED** - What **opportunities for improvements** (project weaknesses) were learned with this project?

- A Statement of Work which includes the scope of the project should be agreed upon by all parties that have the approval authority of the project. Any changes to the scope or agreement should follow a change management plan. Constant changes in the objectives and scope of a project will discourage and frustrate project staff which in turn will lead to a high potential of turnover of knowledgeable staff.
- Allow time in the schedule for the gate approvals and the production and approvals of all required documents and deliverables from the PPM workflow.
- Projects are less risky and tend to be more successful if you do not exceed a two year timeframe for implementation of a chunk of the functionality.

- Executive leadership, including providing strategic direction to the project and promoting executive buy-in to high government officials, is key to success of the project.
- Involve the entire project staff in developing tasks and timelines that will later become part of the MS Project plan. Communicate project plan changes to the staff so that everyone knows the expectations.
- Devise a plan to mitigate the risks introduced by the bureaucratic decisions made by those outside of the project that did not understand the business goals.
- Make certain that you have knowledgeable technical resources assigned to your project from the beginning.

EPMO and DIRM should agree upon the use of standard templates.

Exhibit B

DHHS Case Management Definition

1. **LESSONS LEARNED** - What were the **positive** lessons learned (project strengths) from this effort?

- Developed a clearer understanding of the SB991 process as it relates to a Program and its Project components
- In coordination with the EPMO, ITS, and ETS was able to breakdown a large project into manageable chunks
- Developed good understanding and professional relationship with the Enterprise Project Management Office (EPMO).

2. **LESSONS LEARNED** - What **opportunities for improvements** (project weaknesses) were learned with this project?

- Clarify roles and responsibilities of all the stakeholders including, Project Manager, Project Manager Advisor, Sponsor and Project Director. Responsibility of the project should be shared among management and the project team including above roles.
- The DIRM project templates need to have process documented along with examples for clarifications

- The NCFAST Program needs a better communication plan to communicate when changes occur.
- Lessons learned in various projects at DIRM should be shared among the projects. DIRM Project Office can create a shared directory where other projects can share documents.
- Need to identify, during the planning and design phase, skill sets needed by personnel (such as requirements analysis and technical documentation) and acquire those skills, either through knowledgeable staff or training, prior to the execution of the tasks in which those skills are needed.
- Development of a realistic overall project plan and ensure that there is enough time to document the feedback from the team members.
- Strategic changes in direction, after project initiation, should be documented in the UMT as issues with impacts identified to schedules and budgets.
- It will save time if the templates used by DIRM can be reviewed by EPMO so that later there will be fewer questions.

Exhibit C

DHHS NC FAST Case Management Software Selection

1. **LESSONS LEARNED** - What were the **positive** lessons learned (project strengths) from this effort?

- Obtaining a resource with expertise in government procurements assisted in planning a realistic scope for the RFP.
- ETS encouraged the project to involve them early in the project, keeping them apprised as the development of the requirements and use cases proceeded.
- From standard set of requirements, seek a case management tool that already has a standard, uniform solution.
- Confirm that you do have buy-in from all your stakeholders, including Federal, State and County agencies.
- Do not plan to customize solution for individual counties.
- Provide status reports as defined in the communications plan.
- Custom off the Shelf solutions are preferred in today's environment since transfer systems have proven to be just as costly as new development projects.

2. **LESSONS LEARNED** - What **opportunities for improvements** (project weaknesses) were learned with this project?

- A Statement of Work which includes the scope of the project should be agreed upon by all parties that have the approval authority of the project. Any changes to the scope or agreement should follow a change management plan. Constant changes in the objectives and scope of a project will discourage and frustrate project staff which in turn will lead to a high potential of turnover of knowledgeable staff.
- Allow time in the schedule for the gate approvals and the production and approvals of all required documents and deliverables from the PPM workflow.
- Projects are less risky and tend to be more successful if you do not exceed a two year timeframe for implementation of a chunk of the functionality.
- Executive leadership, including providing strategic direction to the project and promoting executive buy-in of high government officials, is key to success of the project.
- Involve the entire project staff in developing tasks and timelines that will later become part of the MS Project plan. Communicate project plan changes to the staff so that everyone knows the expectations.
- Devise a plan to mitigate the risks introduced by the bureaucratic decisions made by those outside of the project that did not understand the business goals.
- Make certain that you have knowledgeable technical resources assigned to your project from the beginning.
- EPMO and DIRM should agree upon the use of standard templates.

Exhibit D

DHHS NC FAST Program Execution SFY07

1. **LESSONS LEARNED** - What were the **positive** lessons learned (project strengths) from this effort?

- Managing and controlling the tasks and responsibilities connected to IT programs require dedicated resource to budget, communicate and report the multi-project efforts.
- Confirm that you do have buy-in from all your stakeholders, including Federal, State and County agencies.
- Provide status reports as defined in the communications plan.
- With a managed program structure, staff can be utilized across several projects, providing 100% utilization of dedicated staff.

- Each project within the program follows an established standard. As projects are added the program, knowledge from the prior projects can be utilized to develop realistic plans, timelines and budget.

2. **LESSONS LEARNED** - What **<u>opportunities for improvements</u>** (project weaknesses) were learned with this project?

- A Statement of Work which includes the scope of the project should be agreed upon by all parties that have the approval authority of the project. Any changes to the scope or agreement should follow a change management plan. Constant changes in the objectives and scope of a project will discourage and frustrate project staff which in turn will lead to a high potential of turnover of knowledgeable staff.
- Allow time in the schedule for the gate approvals and the production and approvals of all required documents and deliverables from the PPM workflow.
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- Devise a plan to mitigate the risks introduced by the bureaucratic decisions made by those outside of the project that did not understand the business goals.
- Make certain that you have knowledgeable technical resources assigned to your project from the beginning.
- EPMO and DIRM should agree upon the use of standard templates.

Exhibit E

DOC Sex Offender GPS

1. **LESSONS LEARNED** - What were the **positive** lessons learned (project strengths) from this effort?

   As a team, DOC was able to meet its mandated implementation date of January 1, 2007 while providing full function, and staying within budget.

2. **LESSONS LEARNED** - What **opportunities for improvements** (project weaknesses) were learned with this project?

   The EPMO should consider a "fast track" methodology for short duration projects, especially those with legislatively mandated implementation dates. In our case, it was a four month project.

   We encountered various delays when there was no back-up for gate approvers.

   EPMO templates would be more useful if the supporting documentation was clearer regarding expectations. The supporting documentation should clarify what it will take to fully complete the template so you can pass a gate review the first time.

Exhibit F

DOI Fire and Rescue Safety Tracking System (FRSTS)

Positive Situations and Lessons Learned

Situation	Outcome	Lessons Learned
Use of Hibernate framework for data persistence saved time during development phase.	Despite learning curve issues, very little time was spent writing SQL for basic operations. Almost no-one has written save, update or delete statements in SQL thanks to the Hibernate framework.	If we had written and debugged all of the Create/Replace/Update/Delete code by hand we would not have delivered the project until August at earliest, rather than start of June. The framework used for data persistence simplified the development process.
Use of Spring Framework helped isolate conflicts during build and development phase.	The modular nature of the Spring framework meant that most errors were quickly identified and fixed.	It is easier to isolate problem code when the source files are small (< 500 lines) and targeted to one task, rather than very large and shared by many different content areas.
Use of Jasper reports helped greatly simplify roll out of reports to production.	Unlike with the Crystal Reports product, time was not wasted re-pointing each report to a different database every time we migrated the product to a different platform.	New technology can be a good thing. There is nothing we have wanted to do with Jasper Reports that we have been unable to accomplish, from multiple sub-reports to mailing labels, from SQL-only reports to those created with java beans.

Situation	Outcome	Lessons Learned
Use of Development Wiki, in particular an organized FAQ section, helped disseminate new knowledge to team.	Most of the technologies used on the OSFM project were new to the team. The Development Wiki centralized the links to information on the technology, and served as a clearing house for lessons learned, tips & tricks, and other useful information.	A development Wiki integrated with the Issues log will be utilized for all future projects. In particular, it serves as a valuable tool for new hires or those unfamiliar with the project who are being tasked with some maintenance role.
Use of an automated build process (in our case Anthill Open Source) helped quickly identify un-buildable code.	The build process would die and send an email to the team when the code could not be built, including the error message received during the build process. This saved time by helping to catch and identify mistakes before they propagated to other team members.	An automated build process should be in place for all future projects. However, the build process should automatically start/stop Tomcat upon redeploy, since Tomcat does not release memory resources after restart, leading to eventual Tomcat crash due to lack of memory.
Use of scripted migrations techniques enhanced though time consuming proved beneficial in the end	Builds and conversion of replaced system data were easier to manage. Processes could be kicked off and left unmonitored to run over night.	Troubleshooting, managing and monitoring of the final data migration is much easier with the use of scripted programs.

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Negative Situations and Lessons Learned

Situation	Outcome	Lessons Learned
Requirements group worked with a requirements document prepared by contractor two years earlier	In reusing a prior document, we inherited any flaws in analysis inherent in the document, some of which did not surface until late in the project.	As painful as it may be, the requirements process should have been started from scratch, rather than use any part of a prior document.
Requirements were not written in a 'testable' fashion. Final code was not checked against requirements documentation.	The product shipped limited verification that all requirements were met. While subject matter experts were given final walk-throughs of the product, it was never done against a list of the stated requirements	Requirements methodologies learned via off-site training session should be employed in future projects. All requirements should be testable, and should be used as a template for creating code tests used to verify the deliverable.
We did not have a fully functional version of the product we were tasked with replacing.	Late in the project we found that there were several menus in the old system that were missing in our instance of the product, but which were very important to the user's daily operations.	If we're replacing a product, and have been given a working copy, make sure users verify that our instance of it is a 1:1 functional match.
Limited peer code review during the development phase. All developers worked in isolation on their assigned tasks.	Product shipped with varying consistency and coding styles across content boundaries. Developers did not re3adily learn from each others mistakes or successes.	While it may seem time consuming, peer review of code (not just GUI layouts, but java & JSP source) can actually save time in the long run by delivering a better product. This also provides mentoring and cross training, both of which reduce stress & fatigue, and increase individual & overall team expertise.
The code base grew so large (currently over 2000 files) that it has become time-consuming to locate files requiring maintenance	Early in the project, the modular layout of Spring was sufficient that we only had 4 primary packages (one each for Data Access, Data Beans, Business Logic, and Front end controllers). As time has progressed and the code base expanded, each of these packages has hundreds of modules, making the process of finding the file you are looking for time consuming.	Assuming an object-oriented language is used, functional areas of the code should be given their own sub-package names at project inception. This way a developer working on a particular functional area of the code would only see the related files. The current OSFM project will soon be re-factored this way.
A lack of familiarity with the team's existing code base meant that very little was re-used for the OSFM project.	With one exception (some javascript that managed dates), none of the existing code used by the ISD team in prior development was re-used for the OSFM project. In some cases (i.e. the list object) this could have reduced development time and cut the learning curve.	Where possible, when a new developer on the team is tasked with determining technology for a new project, they should be paired with an experienced team member. Together they can identify the re-use possibilities of existing code.

Situation	Outcome	Lessons Learned
Development computers were not configured appropriately for project development.	Unacceptable delays were encountered by the team performing simple compiles, which every java developer has to do. At the end of this project, as the code base increased in size, at least 20 minutes of each day were lost due to slow compile and local web server startup times.	Computers used for project development must be configured for more than day to day work use. Extra memory; state of the art development environments are a must NOTE: This is a situation that will soon be remedied by the delivery of appropriately configured new workstations. It is noted here because it caused substantial delays in the OSFM project's development.
A more formalized design was needed. Due to time constraints, the design was high level and often performed in a cyclical process using SME verification	Though this worked reasonably well, it created much redo of code and look and feel.	Get the SME's involved early in look and feel design
A Gantt chart alone does not provide enough emphasis on on project scheduling, configuration changes and dependent tasking	Tasks that were not really on the critical path were mistakenly show as such which caused dependency conflicts when scheduling resources	More emphasis should be on the use of a combined Project Plan, WBS and project schedule
Flooding forced the development team to move to temporary shared offices two weeks before rollout, and then during product rollout to the building where the end-users offices are located.	This was a serendipitous event. In the final weeks of the project the team was placed in close quarters, which greatly enhanced collaboration and facilitated rapid updates as product release neared. For the product release, the development team was on site with the end users, allowing for rapid feedback and bug fixes during the critical first two weeks of production use.	Expect the unexpected and be prepared as addressed in the PMBOK. For future projects also consider moving to a "War Room" atmosphere during the last few weeks before go-live.
Automated testing was not employed	Lack of automated testing processes required developers, SMEs and users to spend excessive time testing	Automated testing processes are good. The save much time, provide good in-depth testing of unlimited scenarios and should be used in future projects
Some SME's were not know or identified until well in to the project which caused rework.	Project sponsor only identified high level SME's and only those participated in reviews. Other were made aware of late into project	Ask and ask again and be sure that all SME's for even the smallest area of the project are identified upfront and are utilized in all phases of the project.
Separate the GUI review from the code review	Code reviews were too drawn out and time consuming	Code review and GUI review should be broken down into two processes conducted by other members other than the owning developer. Comparison to the prescribed standards is a must.